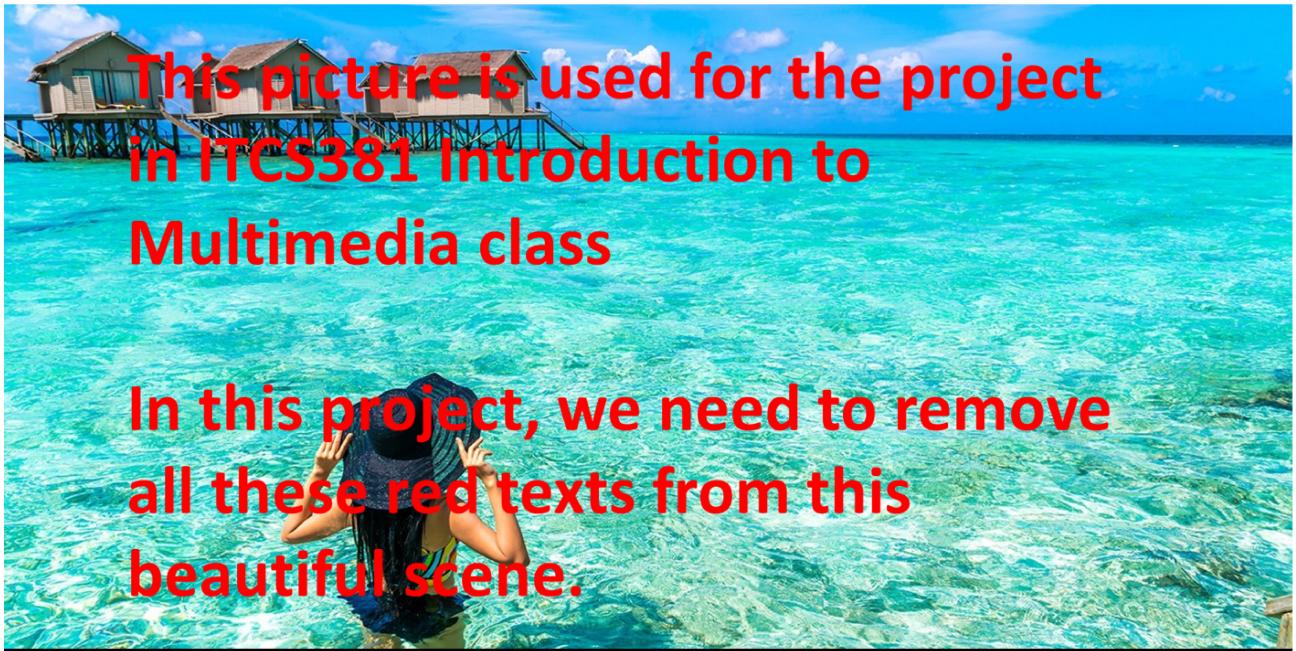


Remove red-text overlay and then remove an object from an image

Read an image "oceanview01_with_text.png" and display it.

```
oceanviewt = imread("oceanview01_with_text.png");  
imshow(oceanviewt)
```



Create mask from red-text overlay. In this image, red texts has pure red colors (255, 0, 0). You should also make or expand the mask area to be a bit bigger than the area of red texts. You can use "imdilate" function to expand the mask area a bit.

```
r = oceanviewt(:, :, 1);  
g = oceanviewt(:, :, 2);  
b = oceanviewt(:, :, 3);  
% red texts has pure red colors (255, 0, 0)  
text = (r == 255) & (g == 0) & (b == 0);  
% "imdilate" function to expand the mask area  
text2 = imdilate(text, strel('disk', 3));
```

Display original mask and expanded mask.

```
montage({text, text2})
```

This picture is used for the project
in ITCS381 Introduction to
Multimedia class

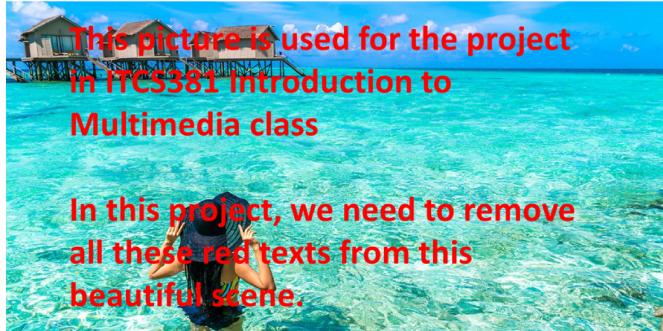
In this project, we need to remove
all these red texts from this
beautiful scene.

**This picture is used for the project
in ITCS381 Introduction to
Multimedia class**

**In this project, we need to remove
all these red texts from this
beautiful scene.**

Display original red-text image and expanded mask.

```
montage({oceanviewt, text2})
```



**This picture is used for the project
in ITCS381 Introduction to
Multimedia class**

**In this project, we need to remove
all these red texts from this
beautiful scene.**

Using inpaintCoherent function to remove red-text overlay.

```
ocean_reoverlay = inpaintCoherent(oceanviewt, text2);
```

Display the original red-text image and the removed-red-text image version.

```
montage({oceanviewt, ocean_reoverlay})
```



Display only the removed-red-text image version.

```
imshow(ocean_reoverlay)
```

Use the drawfreehand function to select a region of interest (ROI) for inpainting. In this task, you will remove the woman out from the image.

```
inpainting = drawfreehand;
```



Use the `createMask` function to generate a mask from the selected ROIs.

```
inpainting_mask = createMask(inpaiting);
```

Display the image to be inpainted (the removed-red-text image) and its corresponding mask image.

```
montage({ocean_reoverlay, inpainting_mask})  
title('Image to Be Inpainted | Mask for Inpainting')
```



Remove objects in the ROI by using the `inpaintExemplar` function.

```
ocean_clean = inpaintExemplar(ocean_reoverlay, inpainting_mask);
```

Display the removed-red-text image and the inpainted or the removed-woman image.

```
montage({ocean_reoverlay, ocean_clean})  
title('Image to Be Inpainted | Inpainted Image')
```



Display only the final image.

```
imshow(ocean_clean)
```

